

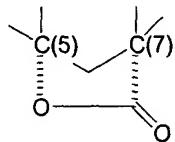
Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims

Claims 1-58 (cancelled).

Claim 59 (original): A process for the preparation of a 4,5-dihydro-5,7-lactone steroid compound, said lactone steroid being substituted with keto or dialkoxy at the 3-carbon, and comprising the moiety:



where C(5) represents the 5-carbon and C(7) represents the 7-carbon of the steroid structure of the lactone compound,

the process comprising:

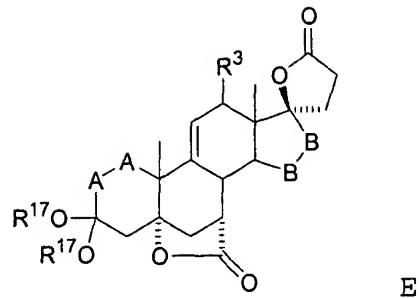
converting a cyano substituted steroid to the 7-carboxylic acid, and thereafter converting the 7-carboxylic acid to the 5,7-lactone.

Claim 60 (original): A process as set forth in claim 59 wherein the substrate comprises a 3-keto- Δ -4,5,7-carboxy steroid, and a ketal intermediate comprising a 3-dialkoxy-5,7-lactone is formed, said 3-dialkoxy-5,7-lactone being hydrolyzed under the acidic conditions to form the 3-keto-5,7-lactone.

Claims 61-62 (cancelled).

Claim 63 (currently amended): A process for the preparation of a

compound corresponding to Formula E:



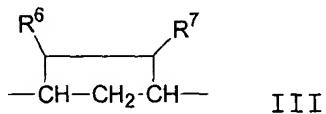
wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

R¹⁷ is C₁ to C₄ alkyl; and

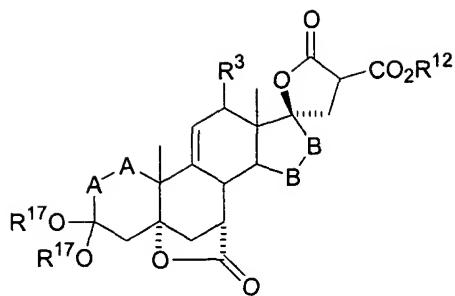
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl and cyano and aryloxy;

the process comprising:

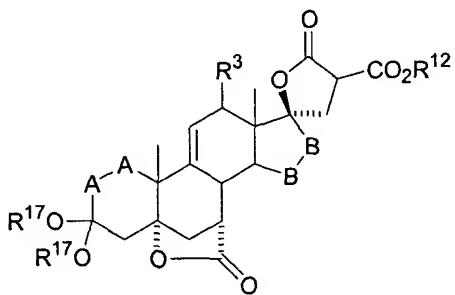
thermally decomposing a compound corresponding to Formula DE2 in the presence of an alkali metal halide, said compound of Formula DE2 having the structure:



DE2

wherein R¹² is C₁ to C₄ alkyl, and -A-A-, -B-B-, R³ and R¹⁷ are as defined above.

Claim 64 (currently amended): A process for the preparation of a compound corresponding to Formula DE2:



DE2

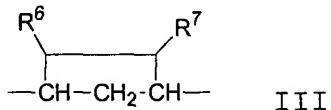
wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

R¹² and R¹⁷ are independently selected from among C₁ to C₄ alkyl; and

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

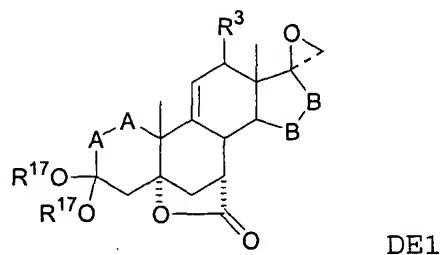


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl,

alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl,
acyloxyalkyl, cyano and aryloxy;

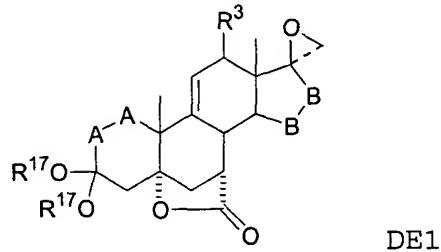
the process comprising:

condensing a compound of Formula DE1 with a dialkyl malonate
in the presence of a base, said compound of Formula DE1 having
the structure:



wherein -A-A-, -B-B-, R³ and R¹⁷ are as defined above.

Claim 65 (currently amended): A process for the preparation of a compound corresponding to Formula DE1:



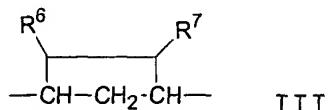
wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

R¹⁷ is C₁ to C₄ alkyl; and

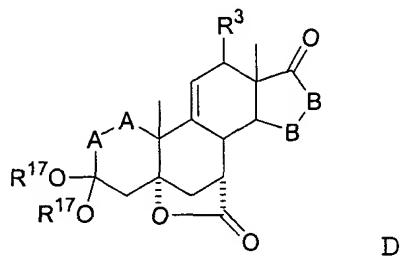
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



where R^6 and R^7 are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy;

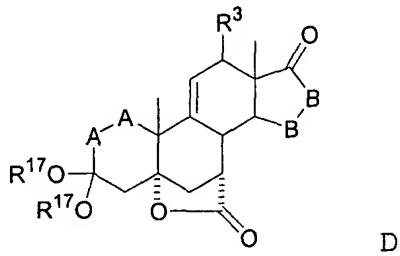
the process comprising:

reacting a compound of Formula D with a sulphonium ylide in the presence of a base, said compound of Formula D having the structure:



wherein -A-A-, -B-B-, R^3 are as defined above.

Claim 66 (currently amended): A process for the preparation of a compound corresponding to Formula D:



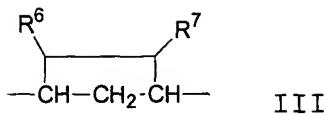
wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

R¹⁷ is C₁ to C₄ alkyl; and

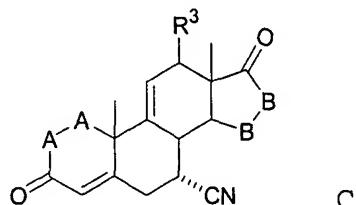
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



where R^6 and R^7 are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy;

the process comprising:

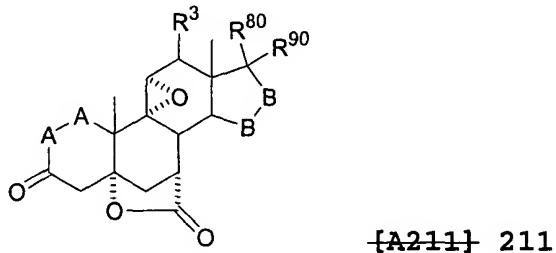
hydrolysis of a compound of Formula C to the 7α -carboxylic acid and reaction under acidic conditions with a trialkyl orthoformate, the compound of Formula C having the structure:



wherein $-A-A-$, $-B-B-$ and R^3 are as defined above.

Claims 67-68 (cancelled).

Claim 69 (currently amended): A process for the preparation of a compound corresponding to Formula 211:



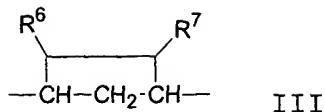
wherein

$-A-A-$ represents the group $-CHR^4-CHR^5-$ or $-CR^4=CR^5-$;

R^3 , R^4 and R^5 are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and

aryloxy; and

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



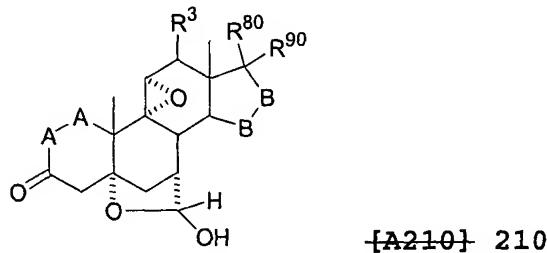
where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy;

R⁸⁰ and R⁹⁰ are independently selected from R⁸ and R⁹, respectively or R⁸⁰ and R⁹⁰ together form keto;

R⁸ and R⁹ are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy, or R⁸ and R⁹ together comprise a carbocyclic or heterocyclic ring structure, or R⁸ or R⁹ together with R⁶ or R⁷ comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring;

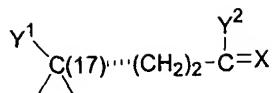
the process comprising:

oxidizing a compound of Formula 210, said compound of Formula 210 having the structure



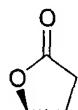
where -A-A-, -B-B-, R³, R⁸⁰ and R⁹⁰ are as defined above.

Claim 70 (original): A process as set forth in claim 69 wherein R⁸ and R⁹ comprise

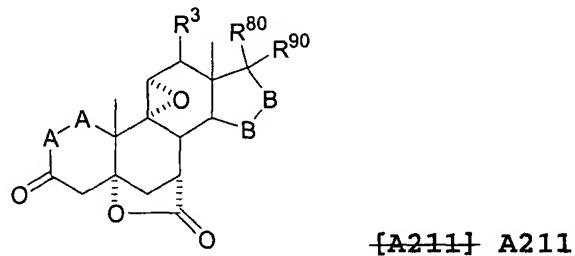


where X represents two hydrogen atoms, oxo or =S;
Y¹ and Y² together represent the oxygen bridge -O-, or
Y¹ represents hydroxy, and
Y² represents hydroxy, lower alkoxy or, if X represents H₂,
also lower alkanoyloxy.

Claim 71 (original): A process as set forth in claim 70 wherein R⁸ and R⁹ comprise

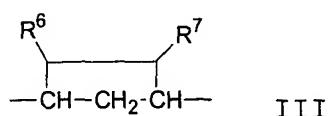


Claim 72 (currently amended): A process for the preparation of a compound corresponding to the Formula:



wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;
R³, R⁴ and R⁵ are independently [[is]] selected from the
group consisting of hydrogen, halo, hydroxy, lower alkyl, lower
alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and
aryloxy; and
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-
oriented group:

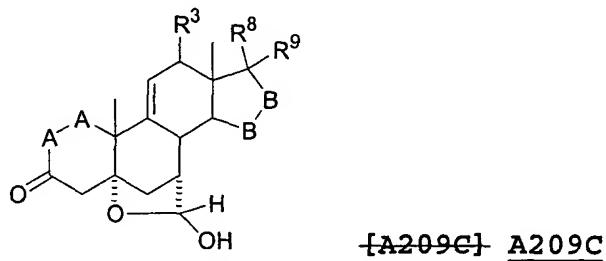


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy; and

R⁸ and R⁹ are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy, or R⁸ and R⁹ together comprise a carbocyclic or heterocyclic ring structure, or R⁸ or R⁹ together with R⁶ or R⁷ comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring;

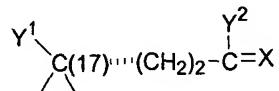
the process comprising:

reacting a 3-keto-5,7-hemiacetal intermediate of Formula A209 with a peroxide oxidizing reagent, said compound of Formula A209C corresponding to the formula:



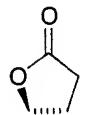
wherein -A-A-, -B-B-, R³, R⁸ and R⁹ are as defined above.

Claim 73 (original): A process as set forth in claim 72 wherein R⁸ and R⁹ comprise

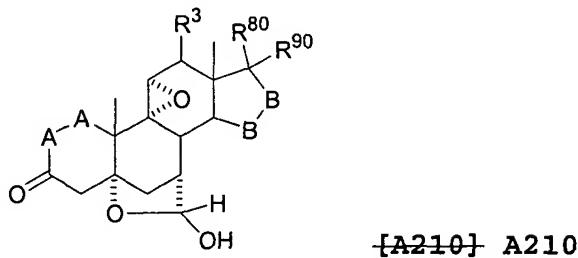


where X represents two hydrogen atoms, oxo or =S;
Y¹ and Y² together represent the oxygen bridge -O-, or
Y¹ represents hydroxy, and
Y² represents hydroxy, lower alkoxy or, if X represents H₂,
also lower alkanoyloxy.

Claim 74 (original): A process as set forth in claim 73 wherein R⁸ and R⁹ comprise



Claim 75 (currently amended): A process for the preparation of a compound corresponding to the Formula:

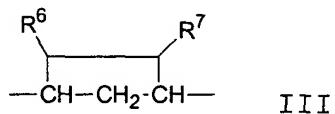


wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy; and

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy;

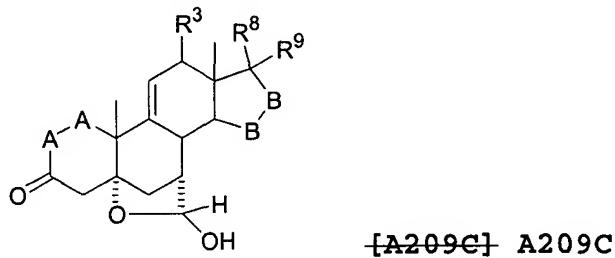
R⁸⁰ and R⁹⁰ are independently selected from R⁸ and R⁹, respectively, or R⁸⁰ and R⁹⁰ together form keto;

R⁸ and R⁹ are independently selected from the group

consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy, or R⁸ and R⁹ together comprise a carbocyclic or heterocyclic ring structure, or R⁸ or R⁹ together with R⁶ or R⁷ comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring;

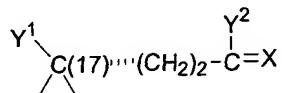
the process comprising:

reacting a 3-keto-5,7-hemiacetal intermediate of Formula A209C with a peroxide oxidizing reagent, said compound of Formula A209C corresponding to the formula:



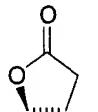
wherein -A-A-, -B-B-, R³, R⁸ and R⁹ are as defined above.

Claim 76 (original): A process as set forth in claim 75 wherein R⁸ and R⁹ comprise

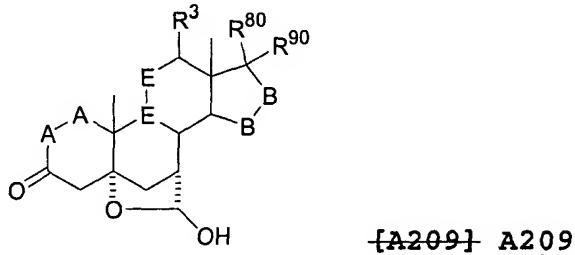


where X represents two hydrogen atoms, oxo or =S;
Y¹ and Y² together represent the oxygen bridge -O-, or
Y¹ represents hydroxy, and
Y² represents hydroxy, lower alkoxy or, if X represents H₂, also lower alkanoyloxy.

Claim 77 (original): A process as set forth in claim 76 wherein R⁸ and R⁹ comprise



Claim 78 (currently amended) : A process for the preparation of a compound corresponding to the Formula:

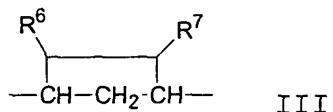


wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

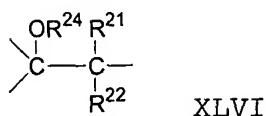
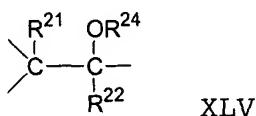
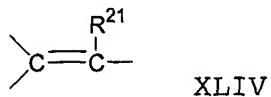
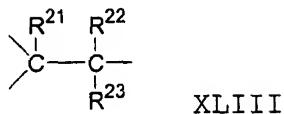


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy;

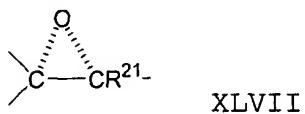
R⁸⁰ and R⁹⁰ are independently selected from R⁸ and R⁹, respectively, or R⁸⁰ and R⁹⁰ together form keto;

R⁸ and R⁹ are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy, or R⁸ and R⁹ together comprise a carbocyclic or heterocyclic ring structure, or R⁸ or R⁹ together with R⁶ or R⁷ comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring;

and -E-E- is selected from among:



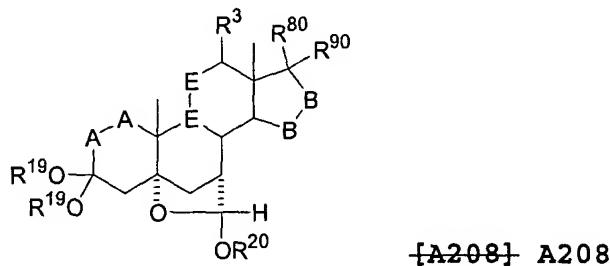
and



where R^{21} , R^{22} and R^{23} are independently selected from among hydrogen, alkyl, halo, nitro, and cyano; and R^{24} is selected from among hydrogen and lower alkyl;

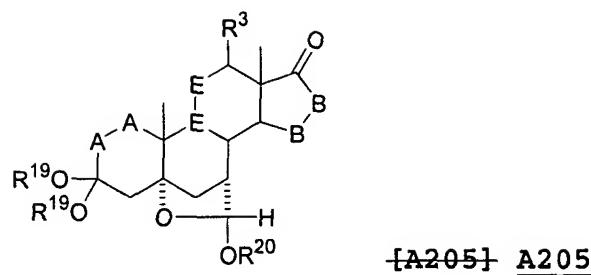
the process comprising:

hydrolyzing a compound corresponding to the Formula A208



wherein -A-A-, -B-B-, -E-E-, R^3 , R^{80} and R^{90} are as defined above; R^{19} is C_1 to C_4 alkyl or the $\text{R}^{18}\text{O}-$ groups together form an O,O -oxyalkylene bridge; and R^{20} is $\text{C}_1\text{-C}_4$ alkyl.

Claim 79 (currently amended): A process for the preparation of a compound corresponding to Formula:

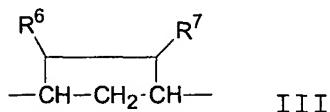


wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

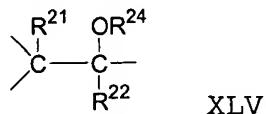
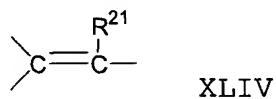
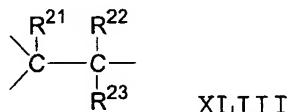


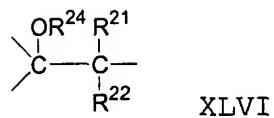
where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy;

R¹⁹ is C₁ to C₄ alkyl or the R¹⁸O- groups together form an O,O-oxyalkylene bridge; and

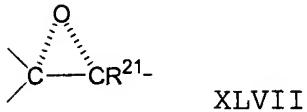
R²⁰ is C₁-C₄ alkyl; and

wherein -E-E- is selected from among:





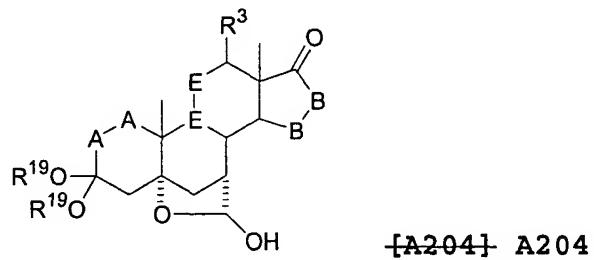
and



where R²¹, R²² and R²³ are independently selected from among hydrogen, alkyl, halo, nitro, and cyano; R²⁴ is selected from among hydrogen and lower alkyl;

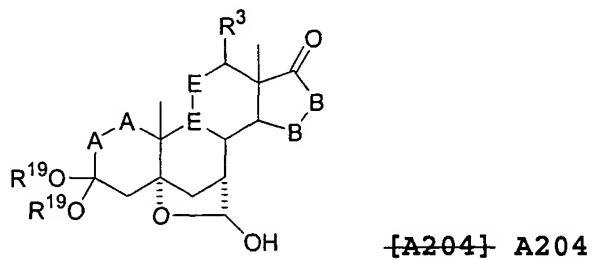
the process comprising:

reacting a compound corresponding to Formula A204 with a lower alcohol and an acid, said compound of Formula A204 having the structure:



wherein -A-A-, -B-B-, -E-E-, R³, and R¹⁹ are as defined above.

Claim 80 (currently amended): A process for the preparation of a compound corresponding to Formula:



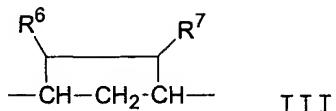
wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the

group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano aryloxy;

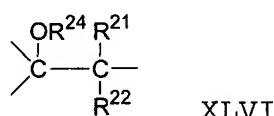
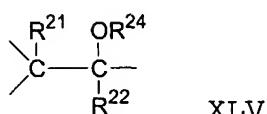
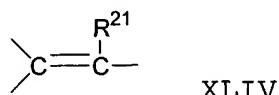
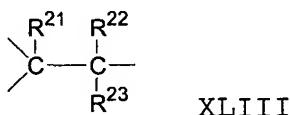
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



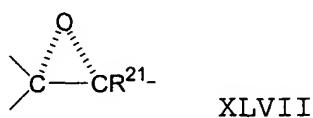
where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy; and

R¹⁹ is C₁ to C₄ alkyl or the R¹⁹O- groups together form an O,O-oxyalkylene bridge;

wherein -E-E- is selected from among:



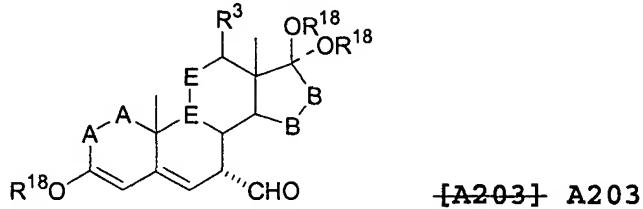
and



where R²¹, R²² and R²³ are independently selected from among hydrogen, alkyl, halo, nitro, and cyano; and R²⁴ is selected from among hydrogen and lower alkyl;

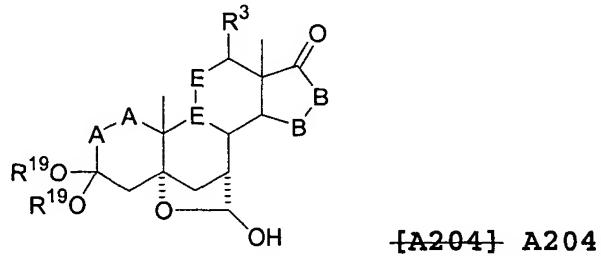
the process comprising:

hydrolyzing compound corresponding to Formula A203, said compound of Formula A203 having the structure:



wherein -A-A-, -B-B-, -E-E- and R³ are as defined above, and R¹⁸ is C₁ to C₄ alkyl or the R¹⁸O- groups together form an O,O-oxyalkylene bridge.

Claim 81 (currently amended): A process for the preparation of a compound corresponding to Formula:

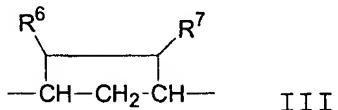


wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

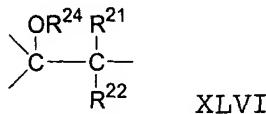
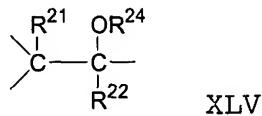
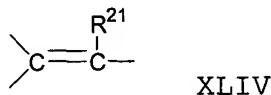
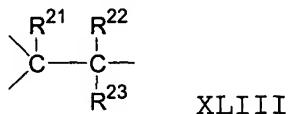


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl,

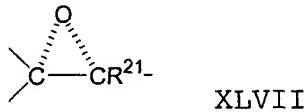
acyloxyalkyl, cyano and aryloxy; and

R¹⁹ is C₁ to C₄ alkyl or the R¹⁹O- groups together form an O,O-oxyalkylene bridge; and

wherein -E-E- is selected from among:



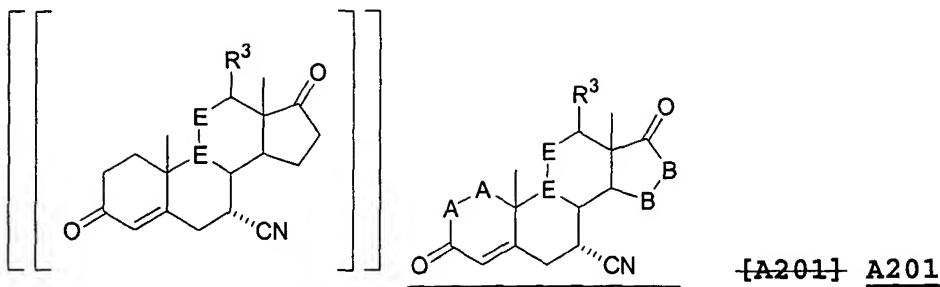
and



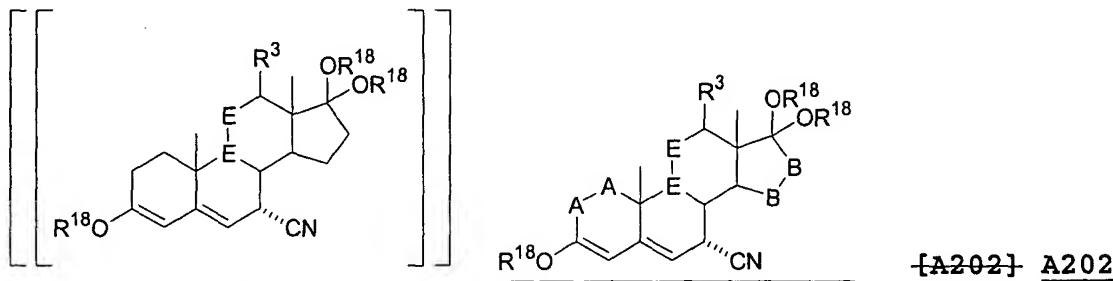
where R¹⁸ is C₁ to C₄ alkyl or the R¹⁸O- groups together form an O,O-oxyalkylene bridge; R²¹, R²² and R²³ are independently selected from among hydrogen, alkyl, halo, nitro, and cyano; and R²⁴ is selected from among hydrogen and lower alkyl;

the process comprising:

protecting the keto substituents of a compound corresponding to Formula A201 by reaction with alkanol under acid condition in the presence of orthoformate, said compound of Formula A201 having the structure:



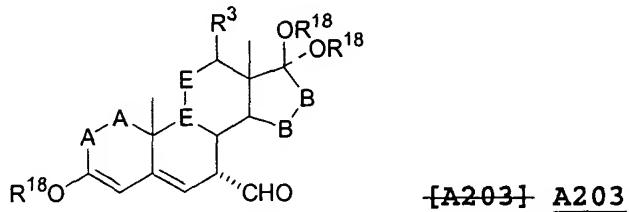
wherein -A-A-, -B-B-, -E-E- and R³, are as defined above, thereby producing a 3-enol ether intermediate corresponding to Formula A202:



wherein -A-A-, -B-B-, -E-E- and R³ are as defined above, and R¹⁸ is C₁ to C₄ alkyl or the R¹⁸O- groups together form an O,O-oxyalkylene bridge; and

reducing said compound of Formula A202.

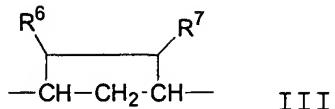
Claim 82 (currently amended): A process for the preparation of a compound corresponding to the formula:



wherein

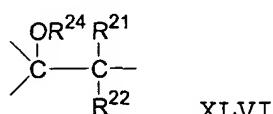
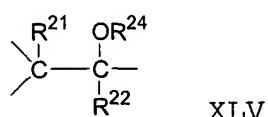
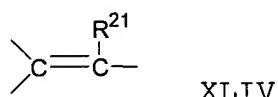
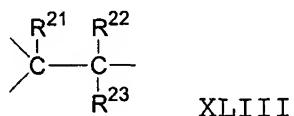
-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;
R³, R⁴ and R⁵ are independently [[is]] selected from the
group consisting of hydrogen, halo, hydroxy, lower alkyl, lower
alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and
aryloxy;

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

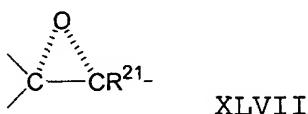


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy; and

wherein -E-E- is selected from among:



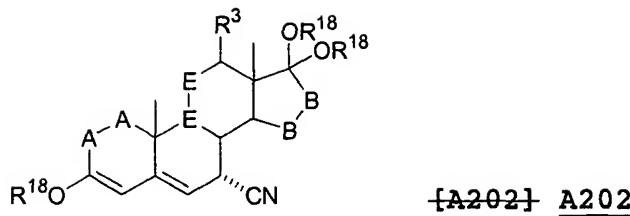
and



where R¹⁸ is C₁ to C₄ alkyl or the R¹⁸O- groups at C-17 together form an O,O-oxyalkylene bridge; R²¹, R²² and R²³ are independently selected from among hydrogen, alkyl, halo, nitro, and cyano; and R²⁴ is selected from among hydrogen and lower alkyl;

the process comprising:

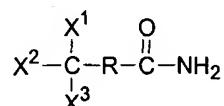
reducing a compound corresponding to Formula A202:



wherein -A-A-, -B-B-, -E-E-, R³, and R¹⁸ are as defined above.

Claims 83-92 (cancelled).

Claim 93 (currently amended): A process ~~as set forth in claim 91 for the formation of an epoxy compound comprising contacting a substrate compound having an olefinic double bond with a peroxide compound in the presence of a peroxide activator,~~ wherein said peroxide activator ~~is chlorodifluoroacetamide or corresponds to a compound having corresponds~~ to the formula



wherein

R^P is selected from the group consisting of [[arylene,]] alkenyl, alkynyl and [[-(CX⁴X⁵)_n-]] -(CX⁴X⁵)₂-;

X¹, X², X³, X⁴ and X⁵ are independently selected from among halo, hydrogen, alkyl, haloalkyl and cyano and cyanoalkyl; and
[[n is 0, 1 or 2;

provided that when n is 0, then at least one of X¹, X² and X³ is halo; and]]

provided that [[when R^P is -(CX⁴X⁵)_n- and n is 1 or 2, then]] at least one of X⁴ and X⁵ is halo.

Claim 94 (currently amended): A process as set forth in claim [[92]] 93 wherein [[n is 0]] and at least two of X¹, X² and X³ are

halo or perhaloalkyl.

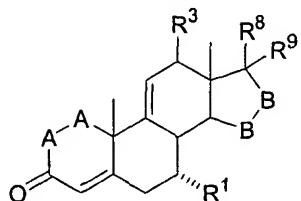
Claim 95 (currently amended): A process as set forth in claim [[92]] 93 wherein all of X^1 , X^2 , X^3 , X^4 and X^5 are halo or perhaloalkyl.

Claim 96 (currently amended): A process as set forth in claim [[91]] 93 wherein said peroxide activator is a trihaloacetamide.

Claim 97 (currently amended): A process as set forth in claim 95 wherein said peroxide activator is trichloroacetamide.

Claim 98 (currently amended): A process as set forth in claim [[91]] 93 wherein said peroxide activator is selected from the group consisting of chlorodifluoroacetamide and heptafluorobutyramide.

Claim 99 (currently amended): A process as set forth in claim [[91]] 93 wherein said substrate compound corresponds to the Formula:



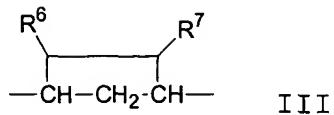
wherein

-A-A- represents the group $-\text{CHR}^4-\text{CHR}^5-$ or $-\text{CR}^4=\text{CR}^5-$;
 R^3 , R^4 and R^5 are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxy carbonyl, cyano and aryloxy;

R^1 represents an alpha-oriented lower alkoxy carbonyl or

hydroxycarbonyl radical;

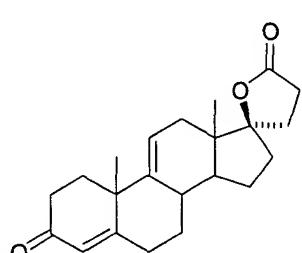
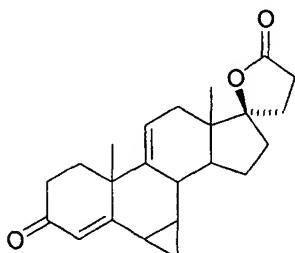
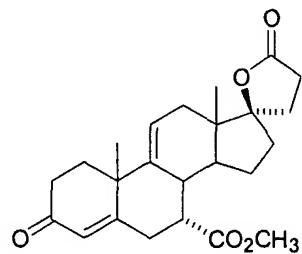
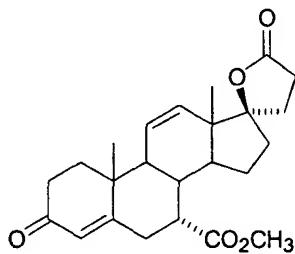
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

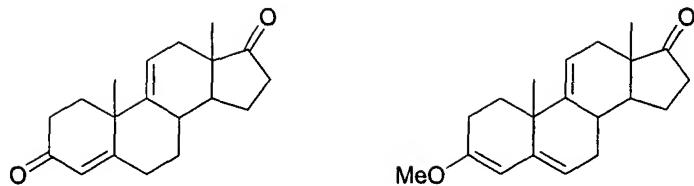


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy; and

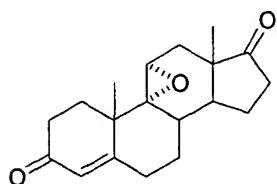
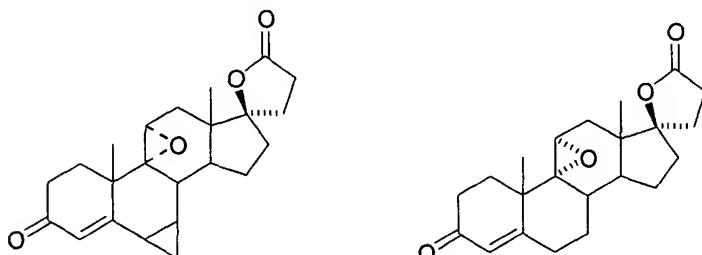
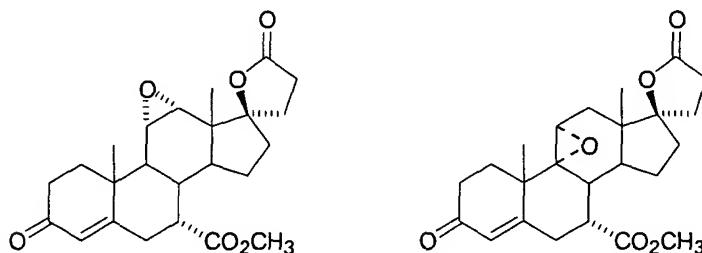
R⁸ and R⁹ are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy, or R⁸ and R⁹ together comprise a carbocyclic or heterocyclic ring structure, or R⁸ or R⁹ together with R⁶ or R⁷ comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring.

Claim 100 (currently amended): A process as set forth in claim [[91]] 93 wherein said substrate compound is selected from the group consisting of:

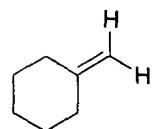
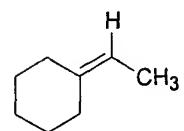
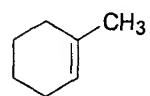
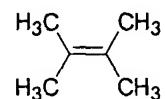
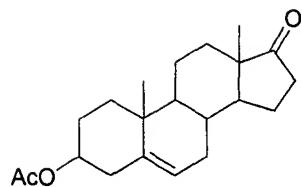




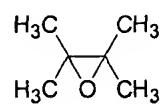
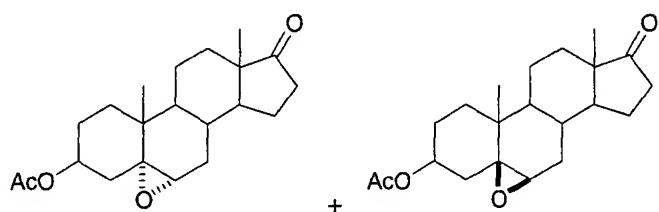
and a product of the epoxidation reaction is selected from the group consisting of:

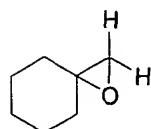
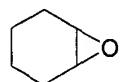
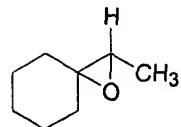
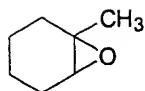


Claim 101 (currently amended): A process as set forth in claim [[91]] 93 wherein said substrate compound is selected from the group consisting of:



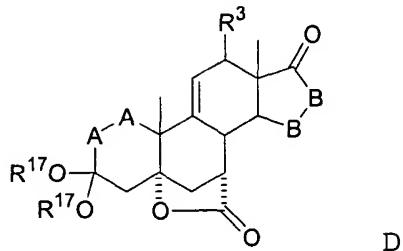
and a product of the epoxidation reaction is selected from the group consisting of:





Claim 102-140 (cancelled).

Claim 141 (currently amended): A compound corresponding to Formula D:



wherein

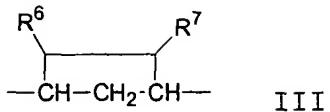
-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

R¹⁷ is C₁ to C₄ alkyl; and

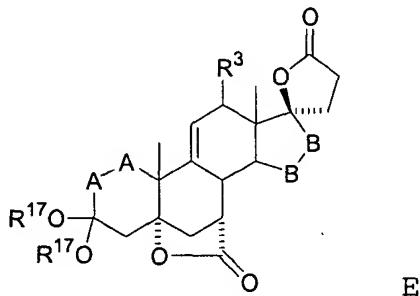
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-

oriented group:



where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy.

Claim 142 (currently amended): A compound corresponding to Formula E:



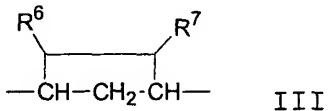
wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

R¹⁷ is C₁ to C₄ alkyl; and

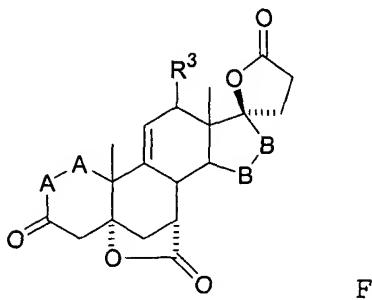
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl,

acyloxyalkyl, cyano and aryloxy.

Claim 143 (currently amended): A compound corresponding to Formula F:

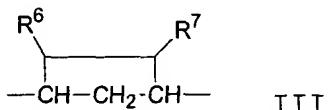


wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

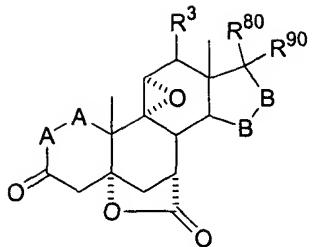
R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy; and

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy.

Claim 144 (currently amended): A compound corresponding to Formula 211:



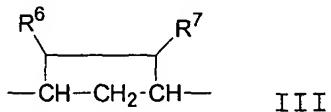
{211} 211

wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy; and

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

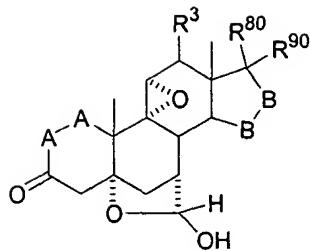


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy;

R⁸⁰ and R⁹⁰ are independently selected from R⁸ and R⁹, respectively or R⁸⁰ and R⁹⁰ together form keto; and

R⁸ and R⁹ are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy, or R⁸ and R⁹ together comprise a carbocyclic or heterocyclic ring structure, or R⁸ or R⁹ together with R⁶ or R⁷ comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring.

Claim 145 (currently amended): A compound corresponding to Formula 210:



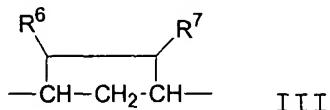
[210] 210

wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy; and

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

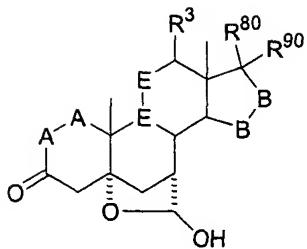


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy;

R⁸⁰ and R⁹⁰ are independently selected from R⁸ and R⁹, respectively, or R⁸⁰ and R⁹⁰ together form keto; and

R⁸ and R⁹ are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy, or R⁸ and R⁹ together comprise a carbocyclic or heterocyclic ring structure, or R⁸ or R⁹ together with R⁶ or R⁷ comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring.

Claim 146 (currently amended): A compound corresponding to Formula 209:



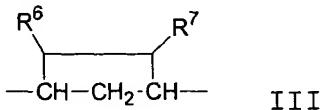
{209} 209

wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy; and

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

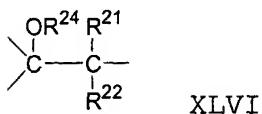
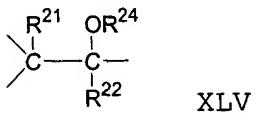
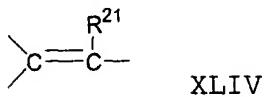
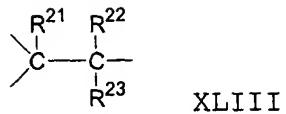


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy;

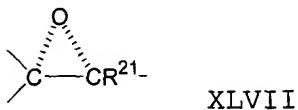
R⁸⁰ and R⁹⁰ are independently selected from R⁸ and R⁹, respectively, or R⁸⁰ and R⁹⁰ together form keto;

R⁸ and R⁹ are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy, or R⁸ and R⁹ together comprise a carbocyclic or heterocyclic ring structure, or R⁸ or R⁹ together with R⁶ or R⁷ comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring; and

-E-E- is selected from among:

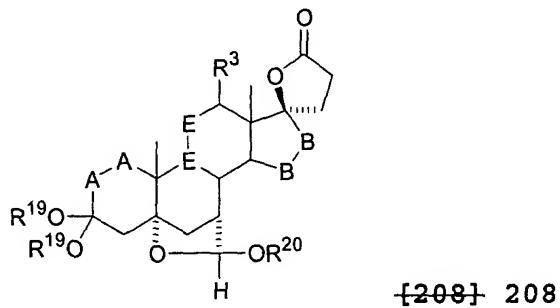


and



where R^{21} , R^{22} and R^{23} are independently selected from among hydrogen, alkyl, halo, nitro, and cyano; and
 R^{24} is selected from among hydrogen and lower alkyl.

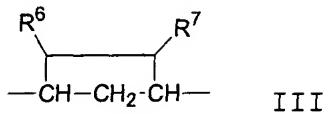
Claim 147 (currently amended): A compound corresponding to Formula 208:



wherein

-A-A- represents the group $-CHR^4-CHR^5-$ or $-CR^4=CR^5-$;
 R^3 , R^4 and R^5 are independently [[is]] selected from the
group consisting of hydrogen, halo, hydroxy, lower alkyl, lower
alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and
aryloxy;

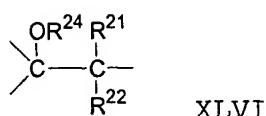
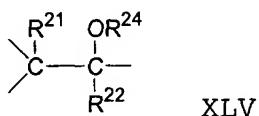
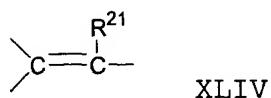
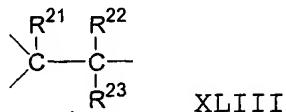
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



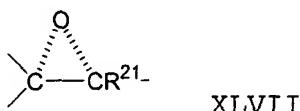
where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy; and

R²⁰ is C₁-C₄ alkyl; and

-E-E- is selected from among:



and

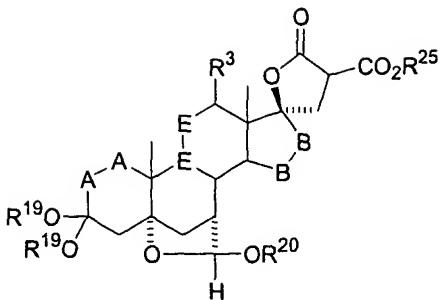


where R¹⁹ is C₁ to C₄ alkyl or the R¹⁸O- groups together form an O,O-oxyalkylene bridge;

R²¹, R²² and R²³ are independently selected from among hydrogen, alkyl, halo, nitro, and cyano; and

R²⁴ is selected from among hydrogen and lower alkyl.

Claim 148 (currently amended): A compound corresponding to Formula 207:



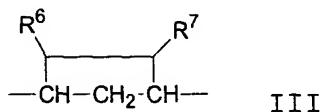
{207} 207

wherein

-A-A- represents the group $-\text{CHR}^4-\text{CHR}^5-$ or $-\text{CR}^4=\text{CR}^5-$;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

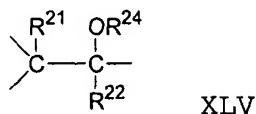
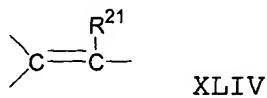
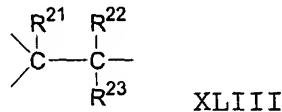
-B-B- represents the group $-\text{CHR}^6-\text{CHR}^7-$ or an alpha- or beta-oriented group:

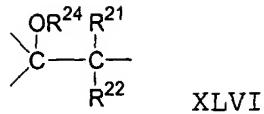


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy; and

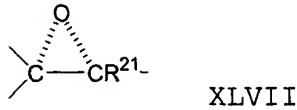
R²⁰ is C₁-C₄ alkyl; and

-E-E- is selected from among:





and



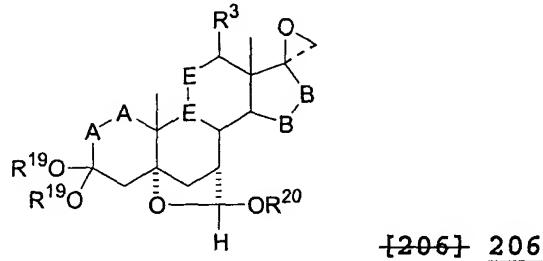
where R¹⁹ is C₁ to C₄ alkyl or the R¹⁸O- groups together form an O,O-oxyalkylene bridge;

R²¹, R²² and R²³ are independently selected from among hydrogen, alkyl, halo, nitro, and cyano;

R²⁴ is selected from among hydrogen and lower alkyl; and

R²⁵ is C₁ to C₄ alkyl.

Claim 149 (currently amended) : A compound corresponding to Formula 206:

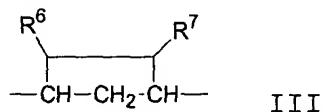


wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

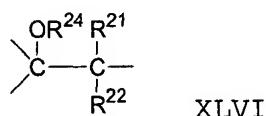
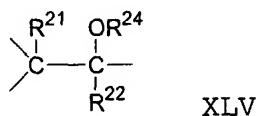
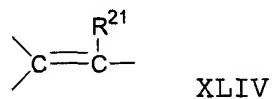
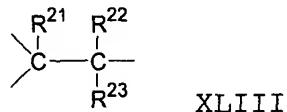
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



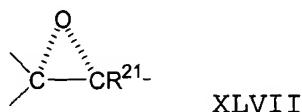
where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy;

R²⁰ is C₁-C₄ alkyl; and

-E-E- is selected from among:



and

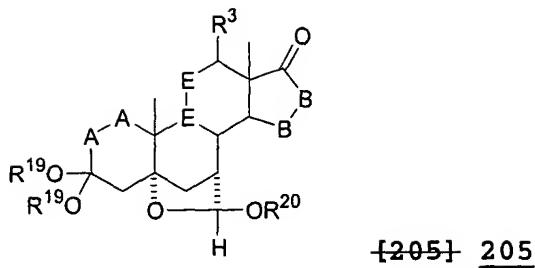


where R¹⁹ is C₁ to C₄ alkyl or the R¹⁸O- groups together form an O,O-oxyalkylene bridge;

R²¹, R²² and R²³ are independently selected from among hydrogen, alkyl, halo, nitro, and cyano;

R²⁴ is selected from among hydrogen and lower alkyl.

Claim 150 (currently amended): A compound corresponding to Formula 205:

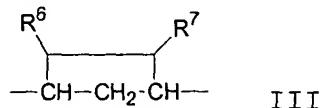


wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

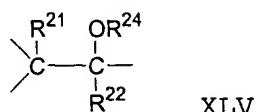
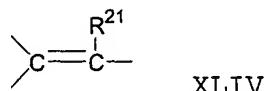
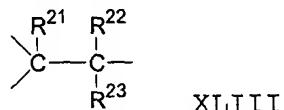
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

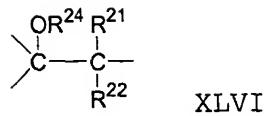


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy; and

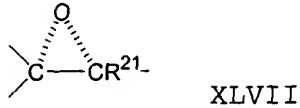
R¹⁹ and R²⁰ are independently selected from C₁-C₄ alkyl; and

-E-E- is selected from among:





and

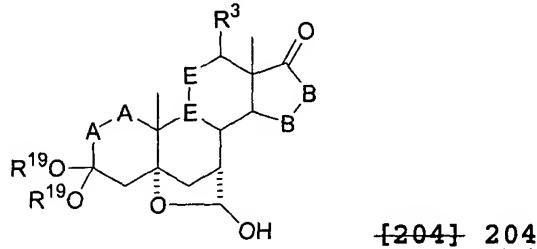


where R¹⁹ is C₁ to C₄ alkyl or the R¹⁸O- groups together form an O,O-oxyalkylene bridge;

R²¹, R²² and R²³ are independently selected from among hydrogen, alkyl, halo, nitro, and cyano;

R²⁴ is selected from among hydrogen and lower alkyl.

Claim 151 (currently amended): A compound corresponding to Formula 204:

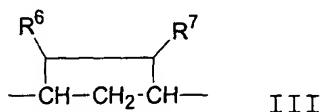


wherein

-A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

R³, R⁴ and R⁵ are independently [[is]] selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

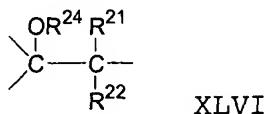
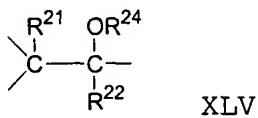
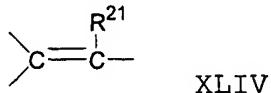
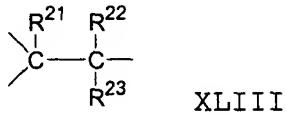
-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:



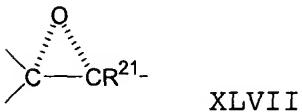
where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl,

alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl,
acyloxyalkyl, cyano and aryloxy; and

-E-E- is selected from among:



and

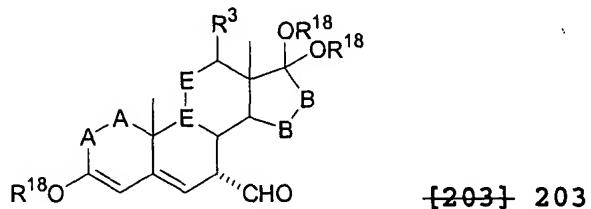


where R^{18} is C_1 to C_4 alkyl or the $R^{18}O-$ groups together form
an O,O-oxyalkylene bridge;

R^{21} , R^{22} and R^{23} are independently selected from among
hydrogen, alkyl, halo, nitro, and cyano;

R^{24} is selected from among hydrogen and lower alkyl.

Claim 152 (currently amended): A compound corresponding to
Formula 203:



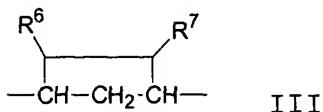
wherein

-A-A- represents the group $-CHR^4-CHR^5-$ or $-CR^4=CR^5-$;

R^3 , R^4 and R^5 are independently [[is]] selected from the

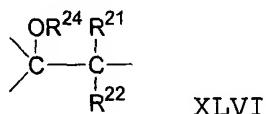
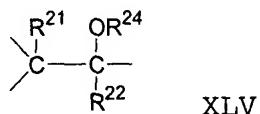
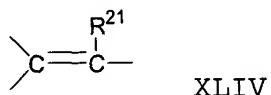
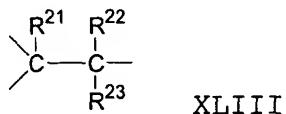
group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano and aryloxy;

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group:

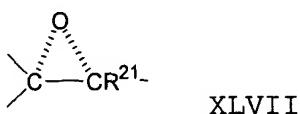


where R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy; and

-E-E- is selected from among:



and



where R¹⁸ is C₁ to C₄ alkyl or the R¹⁸O- groups at C-17 together form an O,O-oxyalkylene bridge;

R²¹, R²² and R²³ are independently selected from among hydrogen, alkyl, halo, nitro, and cyano;

R²⁴ is selected from among hydrogen and lower alkyl.